## Title 15 - Mississippi Department of Health

#### Part III – Office of Health Protection

### **Subpart 77 – Onsite Wastewater**

# CHAPTER 14 REGULATION GOVERNING INDIVIDUAL ONSITE WASTEWATER DISPOSAL: DESIGN STANDARD XII (PUMPS AND PUMP CHAMBERS)

#### 100 Table of Contents

100.01 Introduction

100.02 General 01

100.03 Minimum Pump Specifications 02

100.04 Electrical 02

#### 101 Introduction

Effluent pumping is required in cases where the disposal site is at a higher elevation than the treatment facility or the disposal system is one that utilizes pressure distribution. In these cases the effluent must be moved using pumps. Pumps and associated equipment must be manufactured and warrantied for the purpose of pumping treated wastewater. In all installations the manufacturer's recommendations must be followed. Pumps and pressure lines must be sized correctly to assure that the system is hydraulically sound.

#### 102 General

- 102.01 Pump chambers shall have a storage volume as required per each system type, for subsurface drip, overland disposal and spray systems. Pump chambers for septic tank systems shall be a minimum of 400 gallons.
- 102.02 The pump chamber shall be constructed to withstand normally encountered earth pressures and manufactured with approved materials resistant to the corrosive effects of wastewater, common household chemicals and chemicals used for disinfection.
- 102.03 The pump chamber shall be equipped with an audible high water alarm.
- 102.04 The pump chamber shall have a grade level access large enough to allow servicing and/or removal of the largest component in the chamber. Access ports shall be protected against unauthorized entrance.

- 102.05 The pump chamber shall be vented through the grade level access or by means of a separate vent. In either case the vent shall be a minimum of one inch in diameter.
- 102.06 All openings shall be sealed with a mastic, butyl rubber or other pliable sealant that is waterproof, corrosion resistant and approved for use in contact with wastewater and chemicals used for disinfection, in a manner to prevent the entrance of surface and groundwater.
- 102.07 When pumping to normally gravity fed systems the use of a stilling chamber (baffled distribution box) shall be required. The stilling chamber must be sized larger than the maximum volume pumped in a single dose so as not to flood the chamber.
- 102.08 The stilling chamber shall be constructed and placed so it will drain between doses into the treatment and/or disposal site.

#### 103 Minimum Pump Specifications

- 103.01 The pump shall be equipped with a low water cutoff to prevent damage during low water conditions in the dosing chamber.
- 103.02 The pump shall be constructed of corrosion resistant materials suitable for effluent pumping.
- 103.03 The pump shall be sized per manufacturers' specifications to meet or exceed the hydraulic requirements of the system.
- 103.04 The pump shall be installed in compliance with manufacturers' specifications so as not to violate the pump warranty.
- 103.05 The suction and pressure lines shall be PVC schedule 40 or equal and be sized to meet the hydraulic requirements of the system.

#### 104 Electrical

All electrical components shall be in compliance with the National Electrical Code.

## **CERTIFICATION OF REGULATION**

This is to certify that the above <b>PUT RF</b>	EGULATION NAM	<b>E HERE</b> was adopted by the	
Mississippi State Board of Health on	Put Date Here	to become effective	Put
Date Here .			
		Brian W. Amy, MD, MHA	, MPH
		Secretary and Executive	Officer